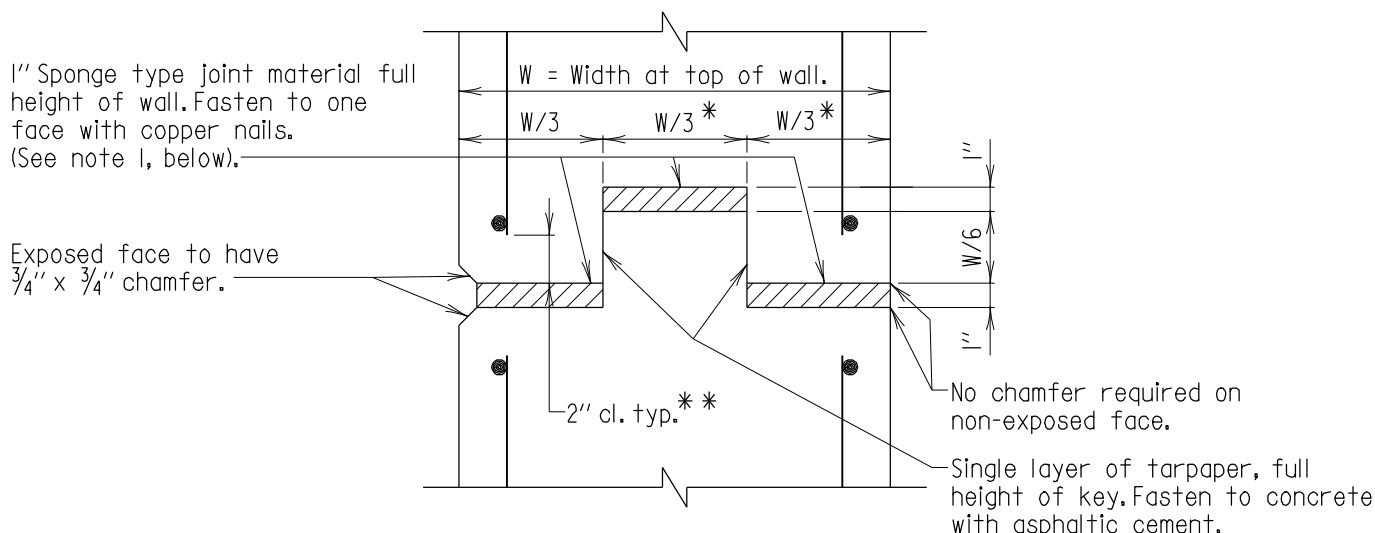


SECTION
STEM CONTRACTION JOINT

Scale: $1\frac{1}{2}'' = 1'-0''$



SECTION
STEM EXPANSION JOINT

Scale: $1\frac{1}{2}'' = 1'-0''$

Notes:

1. Joint locations shall be as shown on contract drawing. If no locations are given concrete retaining walls shall have contraction joints a maximum of every 30'-0"; and expansion joints, with 1" sponge type material (see 911.02), a maximum of every 90'-0"
2. Stop key 9" below top of wall.
3. Reinforcing steel shall not pass through contraction or expansion joint.
4. For battered walls, with stems greater than 12 feet height, key dimensions noted thus *, shall be based on wall thickness at mid height.
5. All keys are nominal size.
6. Only place contraction and expansion joints in stems (no joint in footer).

APPROVAL	
<i>L. S. Friedman</i>	DIRECTOR
OFFICE OF STRUCTURES	
DATE: 4/19/84	
REVISIONS	
SHA	FHWA
1-4-94	.
7-16-02	.
3-22-06	.
5-4-06	.

FHWA APPROVAL
DATE: 5-3-84

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF STRUCTURES

CONCRETE RETAINING WALL
CONTRACTION AND EXPANSION JOINTS

STANDARD NO. RW(6.13)-83-157

SHEET 1 OF 1

RETAINING WALLS